

Remarks/Arguments:

Claims 1-34 are pending and rejected in the application. Claims 1, 7, 14, 15, 16 and 34 have been amended. Claims 22-29 have been cancelled without prejudice or disclaimer. New claims 35-46 have been added. No new matter has been added.

On page 3, the Official Action rejects claims 1-5, 7, 14-16, 18-20 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Takusagawa (US 2003/0225892) in view of Dommety (US 7,512,088) and further in view of Funato (US 2003/0087646). It is respectfully submitted, however, that the claims are patentable over the art of record for at least the reasons set forth below.

Applicants' invention, as recited by claim 1, includes features which are neither disclosed nor suggested by the art of record, namely:

... determining, by the mobile communication apparatus, whether the source access router apparatus ... complies with a Fast Mobile IP ... based on information indicating either compliance or noncompliance with the Fast Mobile IP in a router advertisement message transmitted by the source access router apparatus ...

Claim 1 relates to a system where a mobile apparatus is able to determine if a router apparatus complies with Fast Mobile IP or not. Specifically, the router transmits a router advertisement message to the mobile apparatus. Based on information within the advertisement message, the mobile apparatus is able to determine if the router apparatus is in compliance or noncompliance with Fast Mobile IP. If it is determined that the router is not compatible with Fast Mobile IP, then the home agent is instructed to buffer packets during a handoff process. However, if it is determined that the router is in compliance with Fast Mobile IP, then the router is instructed to forward packets during the handoff process. Support for these features can be at least found in Figs. 1 and 8 and furthermore described on pages 27-32 of Applicants' specification. No new matter has been added.

On page 3 of the Official Action, the Examiner states that Figs. 1 and 12 as well as paragraphs 54-90 of Takusagawa suggest that the mobile device is able to determine if the access router (AR) complies with Fast Mobile IP. In the Advisory Action, the Examiner states

that the broadest reasonable interpretation of the claims is based on paragraphs 54 and 90 of Takusagawa and paragraph 60 of Funato. Applicants, however, respectfully disagree with the Examiner.

As described in paragraphs 54 and 90, Takusagawa teaches a system where the access router buffers the packets addressed to the mobile node during handoff. This can be at least seen in Fig. 1 where access routers 2 and 3 buffer packets for mobile node 1 as mobile node 1 travels between router 2 and router 3 in a network. This feature is a standard Fast Mobile IP process that is taught in conventional art.

Another example, as shown in Fig. 12, Takusagawa suggests a diversion point router 13 which diverges the packets to the new access router 12 during the handoff procedure. In this process, the packets are buffered by the new access router 12 until the mobile node completes the handoff procedure. Thus, Takusagawa suggests one embodiment where standard Fast Mobile IP is implemented (i.e. Fig. 1) and another embodiment where a diverging point router 13 is utilized.

In similar art, Funato's paragraph 60 suggests a solicitation message. However, neither Funato, Dommety, Takusagawa nor their combination suggest that the access router sends an advertisement message to the mobile device indicating the compliance or noncompliance with Fast Mobile IP. Furthermore, neither Funato, Dommety, Takusagawa nor their combination suggest that the mobile device is able to instruct the router apparatus or home agent apparatus based on whether the mobile apparatus is in compliance with Fast Mobile IP.

Applicants' claim 1 is different than the art of record, because an advertising message is transmitted from the router to the mobile device. Information in the advertisement message indicates whether the router is in compliance with Fast Mobile IP or not. Based on this information, the mobile device is then able to determine whether to instruct the router to implement Fast Mobile IP (when the information in the advertisement message indicates compliance with Fast Mobile IP) or instruct the home agent to forward the packets to new router device (when the information and the advertising message indicates noncompliance with Fast Mobile IP ("... determining, by the mobile communication apparatus, whether the source access router apparatus ... complies with a Fast Mobile IP ... based on information indicating either compliance or noncompliance with the Fast Mobile IP in a router advertisement message transmitted by the source access router apparatus").

As shown in at least Applicants' Figs. 1 and 8, and furthermore described on pages 27-32 of Applicants' specification, the access router transmits advertisement message to the mobile node indicating whether the access router is compliant or noncompliant with Fast Mobile IP. The mobile node is then able to instruct the access router or the home agent accordingly. For example, when mobile node 20 as shown in Fig. 1 moves from access router 100c to new access router 100d, access router 100c transmits an advertisement message to mobile node 20. Based on information in the advertisement message, mobile node 20 determines if the access router 100c is compliant or noncompliant with Fast Mobile IP. After mobile node 20 determines that access router 110c is compliant with Fast Mobile IP, then mobile node 20 instructs access router 100c to perform Fast Mobile IP (access router 100c buffers and forwards packets from home agent 40 to new access router 100d). If mobile node 20 determines that access router 100c is not compliant with Fast Mobile IP, then mobile node 20 instructs home agent 40 to stop forwarding packets to access router 100c and start forwarding the packets directly to new access router 100d. Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

Independent claims 7, 14, 15, 16 and 34 include similar features to claim 1. Thus, independent claims 7, 14, 15, 16 and 34 are also patentable over the art of record for at least the reasons set forth above.

Dependent claims 18-20 include all the features of claim 16 from which they depend. Thus, claims 18-20 are also patentable over the art of record for at least the reasons set forth above.

On page 8, the Official Action rejects claims 2-5 and 17 under 35 U.S.C. §103(a) as being unpatentable over Takusagawa in view of Dommety in view of Funato and further in view of Kim (U.S. 7,116,654). Kim is relied upon for a home agent that stores information on an access router. Kim, however, does not make up for the deficiencies of Takusagawa, Dommety and Funato discussed above with respect to claims 1 and 16. Thus, claims 2-5 and 17 are also patentable over the art of record for at least the reasons set forth above.

On page 10, the Official Action rejects claims 6, 8-10 and 21 under 35 U.S.C. §103(a) as unpatentable over Takusagawa in view of Dommety in view of Funato and further in view of Leung (U.S. 6,636,498). Leung is relied upon for a step wherein the home agent notifies the mobile node when the home agent can not acquire information on the access router. Leung,

however, does not make up for the deficiencies of Takusagawa, Dommety and Funato discussed above with respect to claims 1 and 16. Thus, these claims are also patentable over the art of record for at least the reasons set forth above.

On page 14, the Official Action rejects claims 11, 30 and 31 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Dommety, Funato, Leung and Shimizu (U.S. 2002/0045450). Shimizu is relied upon for a home agent which buffers data. Shimizu, however, does not make up for the deficiencies of Takusagawa, Dommety Funato and Leung discussed above with respect to claim 1. Thus, these claims are also patentable over the art of record for at least the reasons set forth above.

On page 15, the Official Action rejects claims 12, 13 and 32 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Dommety, Funato, Leung, Shimizu and further in view of Okajima (U.S. 2004/0114554). Okajima is relied upon for suggesting a home agent which starts buffering data to the source access router. Okajima, however, does not make up for the deficiencies of Takusagawa, Dommety Funato, Leung and Shimizu discussed above with respect to claim 1. Thus, these claims are also patentable over the art of record for at least the reasons set forth above.

On page 17, the Official Action rejects claims 28-29 under 35 U.S.C. §103(a) as unpatentable over Kim in view of Funato and Leung. The rejections to claims 28 and 29 are moot in view of their cancellation.

On page 19, the Official Action rejects claim 22 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Funato and Okajima. The rejection to claim 22 is moot in view of its cancellation.

On page 21, the Official Action rejects claim 23 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Funato, Okajima and Shimizu. The rejection to claim 23 is moot in view of its cancellation.

On page 22, the Official Action rejects claims 24-27 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Funato, Okajima and further in view of Leung. The rejections to claims 24-27 are moot in view of their cancellation.

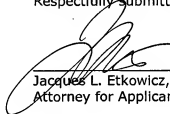
On page 24, the Official Action rejects claim 33 under 35 U.S.C. §103(a) as unpatentable over Takusagawa, Dommety, Funato and further in view Shimizu. As discussed above with respect to claim 14, Shimizu does not make up for the deficiencies of Takusagawa, Dommety and Funato. Thus, claim 33 is also patentable over the art of record for at least the reasons set forth above.

New claims 35-46 further describe the information included in the router advertisement message. Specifically, the information in the advertisement message may include a value and a code field. When the code field value is a specific value (e.g. 0), then the mobile apparatus is able to determine that the source access apparatus complies with Fast Mobile IP.

This feature is at least supported on page 29, lines 8-24 ("whether the access router apparatus 100c complies with Fast Mobile IP or not is determined, for example, by referring to a router advertisement message 2400 ... when a value of a code field 2402 in a handover capability option 2401 is 0, this shows that the access router apparatus complies with Fast Mobile IP"). Claims 35-46 depend upon one of allowable claims 1, 7, 14, 15, 16 or 34. Accordingly, for the reasons set forth above, claims 35-46 are also patentable over the art of record.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Etkowicz', is written over a horizontal line.

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